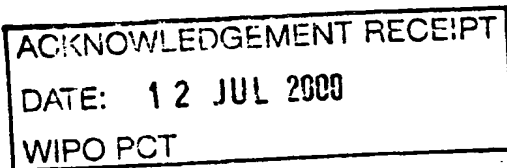


DK 00/310



Kongeriget Danmark

Patent application No.: PA 2000 00087
Date of filing: 18 January 2000
Applicant: NOVI Innovation A/S
Niels Jernesvej 10
DK-9220 Aalborg Ø

This is to certify the correctness of the following information:

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TAASTRUP 27 June 2000

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Modtaget
18 JAN. 2000
PVS



Patent- & Varemærkestyrelsen
Helgeshøj Allé 81
2630 Taastrup

1(4)

FAX: 4350 8001
Fremsendes i alt : 4 sider

Aalborg d. 18. januar 2000

Vedr. patentansøgning

Hiermed fremsendes pr. fax en patentansøgning vedr. A method for determining of 3D position af remote control. Ansøgningen fremsendes efterfølgende pr. post.

Opfinder(e): Jakob Stoustrup & Anders la Cour-Harboe

Ansøger: NOVI Innovation A/S, Niels Jernes Vej 10, 9220 Aalborg Ø

Kvittering for modtagelsen bedes markeret "3D remote control"

Med venlig hilsen


Hans Harding
Erhvervsforsker/Ph.D.

Direkte:

Tel : 9814 0938

Fax : 9814 0942

e-mail : hh@novi.dk

PA 2000 0087

NOVI A/S
Niels Jernes Vej 10
Postboks 8330
DK-9220 Aalborg Øst
Danmark

Tlf. 98 35 45 00
Fax 98 35 45 99
Reg. nr. 166898
e-mail: novi@novi.dk

18/01 '00 09:43

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Modtaget
18 JAN. 2000

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r.v.s

2(4)

18. januar 2000

Jakob Stoustrup
Anders la Cour-Harbo
c/o
Hans Harding
NOVI Innovation A/S
Niels Jernes Vej 10
9220 Aalborg Ø

Method for determining of
3D position of remote control

(4)

Method for determining 3D position of remote control

Aalborg University, January 17th 2000

By Anders la Cour-Harbo and Jakob Stoustrup

Introduction

It has in recent years become possible to direct sound produced by ordinary speakers in a given direction by performing suitable alterations of the sound signal. One application of this is directing the sound from a hi-fi sound system towards the listener wherever he may be located. This is vital for producing the correct stereo effect, for instance. The need for determining the position of the listener is evident.

We propose a method for determining the position of a remote control, for electronic equipment such as sound systems, TV sets, and other applications operated by a remote control. This method applies equally well if a device similar in function to a remote control is used.

One particular application of this invention is the locating of the position of the listener in three dimensional space, provided that the listener is close to the remote control.

The determination of position is done by measuring the signals produced by the remote control. By comparing the signal intensity from the remote control at different points on the remotely controlled apparatus the direction and distance of the remote control can be found.

Description of the invention

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The method might use the signals already encoded in the remote control and/or the existing electronic equipment, such as diodes and photo diode, or the method might require new signals and/or electronic equipment to be implemented.

Suggestion for hierarchy of claims

1. A method for determining the three dimensional position of a remote control or device of the like, with respect to an apparatus, comprising:
 - (a) a remotely controlled apparatus,
 - (b) a remote control,
 - (c) a number of receivers.

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